Subject: problem with TRIANGULATION option in CONTOUR

Posted by Ardhuin on Sat, 23 Oct 2010 12:35:31 GMT

Dear all,
I have been having problems with plotting output of a numerical model
that uses unstructured grids using IDL: this model computes wave
heights in the ocean. If I use the set of triangles from the model, I
get really funny errors:
 Out of range subscript encountered: <LONG   Array[66453]>.
although I only have 9626 points and about 16000 triangles.

The command I use is
     CONTOUR,tablep,x,y,$
       xstyle=5,ystyle=5,/FOLLOW,/CELL_FILL, TRIANGULATION=tri,
$
       C_COLOR=colorind(0:c_numlev-2+addmini+addmaxi), $
       LEVELS=lev,/
 NOERASE,TITLE=title,CLIP=[rangex(0),rangey(0),rangex(1),rang ey(1)], $
       XRANGE=rangex,YRANGE=rangey,MAX_VALUE=maxval, $
       POSITION=[blx*winx/mwinx,bly*winy/mwiny,trx*winx/
mwinx,try*winy/mwiny]

Where tablep , x and y
If I first do TRIANGULATE,X,Y,tri   then the contours comes out OK...
but they cut out through land boundaries and islands.

So I was thinking: my triangles must be wrong ...
but if I do a TRIGRID with my triangles then I can plot nicely with
TV ...
         array=trigrid(X,Y,tablep,tri,[dx,dy],
[rangex(0),rangey(0),rangex(1),rangey(1)], $
                 MAX_VALUE=maxval)

So my triangles are OK for TRIGRID but not for CONTOUR... How is that
possible ??